Payson and Tonto and Cherry Water Quality Assurance Revolving Fund (WQARF) Site

Community Advisory Board Meeting

Tuesday, September 9, 2003
6:00 p.m. to 8:00 p.m.
Community Development Meeting Room
303 N. Beeline Highway, Payson, Arizona

FINAL MINUTES

PIOU#: 04-066

Members in attendance:
Nel Gusimat
Robin Morris
Jean Riddell
Robert Ware

ADEQ Staff in attendance:
David Haag, Project Manager
Monica Mascareno, Community Involvement Coordinator

Members absent:
Elaine Drorbaugh
Michelle Dyer
James Erhardt
John Shoemaker
James Winter

Others in attendance:
Edward Slebir
Roger Hattrup
Dorothy Ehrig
Karen Probert, Town of Payson

PIOU #04-066

The meeting began at 6:04 p.m.

The following matters were discussed, considered, and decided upon at the meeting:

1. Welcome and Introductions, conducted by Robert Ware, co-chair.

Mr. Ware introduced himself and welcomed everyone to the meeting.

2. Acceptance or Changes to May 13, 2003 minutes
A quorum of the CAB members was not present. Therefore, it was agreed to table this topic.

3. Discussion and Voting on CAB Application
A quorum of the CAB members was not present. Therefore, it was agreed to table this topic.

4. Review and Discussion of CAB Charter
A quorum of the CAB members was not present. Therefore, it was agreed to table this topic.

5. Discussion and Voting for New Co-Chairs
A quorum of the CAB members was not present. Therefore, it was agreed to table this topic.

6. Presentation of Proposed Remedial Action Plan (PRAP) for Payson PCE (Project Manager: David Haag). Mr. Haag distributed a handout of his presentation.

Mr. Haag began by explaining that the PRAP is available at the Payson Library, that a public comment period for this report is presently underway, and that any comments received from the public during this period will be included in a Responsiveness Summary, as part of the Record of Decision (ROD).

Mr. Haag began his presentation by stating that the PRAP defines the selected remedy proposed in the Feasibility Study (FS) that is capable of meeting the Remedial Objectives (ROs) of the site. The FS looked at reference remedy alternatives ranging from less aggressive to more aggressive. The data is used to determine whether a remedy is cost effective and whether it meets the ROs of the site.

The selected remedial measures include pumping groundwater from six production/extraction wells, treating contaminants of concern (COCs) in the extracted water by granular activated carbon at the expanded groundwater treatment system (EGTS), and delivery of treated water to the town of Payson. The town of Payson will utilize the water as part of their municipal supply, with delivery to residential customers.

The operational pumping rate from the six wells will be approximately 200 gallons per minute (gpm). This rate reflects the current long term average pumping rate for the EGTS. However, if water levels continue to decrease, the pumping rate may also decrease. The minimum flow rate for the system is approximately 80 to 100 gpm. If this occurs, operational modifications will have to be applied to the system, such as adding another well, or a batch tank.

Mr. Haag presented a slide that represents average monthly pumpage of the Interim Groundwater Treatment System (IGTS) which is no longer in operation. The current average pumping rate is approximately 180 to 185 gpm. This rate can be increased, however, that would not gain much because the water table would be drawn down even more than it is currently. Once the flow rate drops to a certain level, the flow rate would have to be lowered to allow the pumps to operate properly.

There were two systems to maintain source control: a dual phase/soil vapor extraction system, and the Interim Groundwater Treatment System (IGTS). Both systems have been completed, and have been shut down. The soil vapor extraction system has been decommissioned, and the vapor wells have been abandoned. The IGTS system has not been on since January 2003. That pump is still there if the system needs to be turned back on.

To measure the proposed cleanup progress, ADEQ will continue to collect semi-annual groundwater quality sampling, evaluate groundwater gradients to determine whether groundwater is moving inward toward the production/extraction wells, and monitor and evaluate groundwater levels to determine the amount of water available to pump. Groundwater quality sampling will help determine whether the plume is contracting or expanding over time, and evaluate how concentrations are changing over time.

Some uncertainties and contingencies are factored into the proposed process. Methyl tert-butyl ether (MTBE) is the prime uncertainty related to groundwater contamination treatment. Some contingencies related to MTBE include: alternating pumping schemes, monitoring sentinel wells, and possibly executing additional carbon change-outs.

Another uncertainty is the Town of Payson New McKamey well. If this well becomes impacted with tetrachloroethene (PCE) above the Aquifer Water Quality Standards (AWQSs) for three consecutive quarters, contingencies may include: Constructing a 4-inch high density polyethylene (HDPE) water main to convey up to 350 gpm, from the New McKamey well to the EGTS.

In response to a question from Robin Morris (CAB member) about whether the New McKemy well would affect the direction of the plume of contamination because it was deepened, Mr. Haag described that ADEQ did not believe that deepening the New McKamey well caused a problem at the Payson PCE site and they did not object when the Town deepened the well. Due to an investigation that took place in the fall of 2001, ADEQ stated that the contamination that was detected at the New McKamey well could have potentially come from the Payson PCE site. However, based upon groundwater flow modeling that was conducted in the Feasibility Study (FS) and on interpretations regarding the bedrock in the area, from exposures and borings at the Tonto & Cherry WQARF site, the connection is not obvious. While the observed contamination may be coming from the Tonto & Cherry site, if a concentration problem develops, it would be addressed by the ROs for the Payson PCE site.

While it is not certain what the length of the remedy will be, the PRAP includes costs of Operation and Maintenance (O&M) for the EGTS for 30 years with three additional years to conduct groundwater monitoring.

Based upon the results of contaminant graph analysis conducted in the FS, it is projected that by approximately 2048, the last monitoring well would have PCE concentrations less than the AWQS.

Most wells will have PCE concentrations less than the AWQS within the 30 year projected time frame of the PRAP.

Mr. Haag presented two slides representing the PCE concentration projection at the EGTS wells.

The life-cycle costs analysis did not include all of the costs of construction of the various remedies (i.e., IGTS, SVE, EGTS). It only included the cost of O&M of the EGTS for 30 years and three years of additional groundwater monitoring, once the EGTS has been turned off.

The cost assumes a beginning Fiscal Year 2004 (FY04) O&M budget of $300,000, increasing at a 3% annual rate (inflation) over the next 30 years. The approximate life-cycle cost is $14,272,624.00.

Additional contingencies include: new water main connection from New McKamey to the EGTS, declining water levels and operational changes for the EGTS, possible installation of a new Tonto Apache Tribe production well west of the site, and MTBE contamination.

Mr. Haag presented a slide representing various water level elevation projections.

7. Update on Payson PCE WQARF site -David Haag
Due to the recent thunderstorms, there was lightening damage to three production wells, EX-1, EX-2, and TOP-Skinner. Semi-annual groundwater sampling was conducted during the end of August and beginning of September. Water quality results have not been received yet.

8. Update on Tonto and Cherry WQARF site - David Haag
Semi-annual groundwater sampling was conducted at the end of August. Water quality results have not been received yet.

Two CAB members inquired about a water quality table with concentration levels, from Rumsey Park. Mr. Haag responded that he would mail the information to the CAB members.

Mr. Haag stated that the current comment period will end on October 2, 2003. He explained that since the Remedial Investigation Report (RI) was finalized in June of 2002, and the Feasibility Study (FS) was finished in June of 2003, and now the PRAP has been approved, the next step is to memorialize any comments from the public, which will then be included into the ROD. The ROD will have to be approved by ADEQ and the Town of Payson. Once this portion is completed, the remainder of the process will consist mainly of O&M procedures, as described in the PRAP.

Mr. Morris inquired about re-injecting the treated wastewater from the wastewater treatment plant at the Payson PCE site. Mr. Haag responded that the treated wastewater is fully allocated. The treated wastewater goes to the Green Valley Park lakes, golf courses, and other beneficial uses. Additionally, the treated wastewater can have elevated concentrations of phosphates, nitrates and bacteria. The EGTS is not equipped to treat nitrates or phosphates.

Mr. Morris inquired if ADEQ has determined the source of the MTBE at the site. Mr. Haag responded that ADEQ has not identified the source of MTBE observed in groundwater monitoring wells at the Payson PCE site. However, MTBE has been detected at some former gas stations and one current gas station. Additional MTBE information at the Payson PCE site is included in the (RI) report and the Feasibility Study (FS) report at the Payson Public Library.

Mr. Morris inquired as to what sort of investigation can be executed, either by ADEQ or the Town of Payson, to determine the source of the MTBE. Why is it costing more to operate this plant because of the MTBE contamination?

Mr. Haag responded that WQARF cannot conduct an investigation for MTBE because it is a chemical that is associated with gasoline spills, and they are regulated by the Leaking Underground Storage Tank (LUST) program. Additionally, EPA and ADEQ have not developed a standard for MTBE, and ADEQ cannot enforce cleanup when there are no standards.

Mr. Haag added that due to the inefficiency for granular activated carbon to absorb MTBE, after certain concentrations, it necessitates additional carbon change-outs.

Karen Probert, of the Town of Payson, responded that the LUST program at ADEQ have conducted investigations, and the town is monitoring for MTBE, and the town has spent quite a bit of money. MTBE has been found near the WQARF sites, most likely coming from underground storage tanks and the MTBE was probably an additive in those storage tanks.

Mr. Morris made a formal request that ADEQ include in the proposed 30-year process, that they find out where that contamination is coming from.

Before beginning the Call to the Public portion of the meeting, Mr. Ware announced that he is resigning from the CAB, and submitted a letter stating so. He also recommended that a phone call campaign be executed to increase CAB attendance. Ms. Mascareno suggested that a letter be generated and sent to all CAB members regarding a decline in attendance. Mr. Ware agreed that a general letter requiring attendance from the CAB members, as well as applauding those who have attended consistently would be a good idea. An option that is available is to amend the charter regarding required attendance, or number of members required for the CAB.

9.Call to the Public
No comments were submitted.

10. Future Meeting plans
A tentative meeting date was set for Wednesday, November 5, 2003.

Mr. Ware adjourned the meeting at 7:30 p.m.